

IN THE CLAIMS:

Please amend Claims 1 and 9 as follows.

1. (Currently Amended) A substrate structure ~~which is a precursor to an electron source, and on which an electron-emitting device of the electron source is to be disposed~~, comprising:

a substrate; and

an insulating material film provided on said substrate,

wherein said insulating material film comprises a plurality of metallic oxide particles having an average particle size within a range of 6 nm to 60 nm as expressed in a median value,

wherein said substrate structure is a precursor to an electron source, and said insulating material film has a surface on which an electron-emitting device of the electron source is to be arranged.

2. (Previously Presented) The substrate structure according to claim 1, wherein said insulating material film further comprises phosphorus.

3. (Previously Presented) The substrate structure according to claim 1, wherein said insulating material film comprises phosphorus in 1 weight portion to 10 weight portions.

4. (Previously Presented) The substrate structure according to any one of

claims 1 to 3, wherein a thickness of said insulating material film is within a range of 200 nm to 600 nm.

5. (Previously Presented) The substrate structure according to any one of claims 1 to 3, wherein a thickness of said insulating material film is within a range of 300 nm to 400 nm.

6. (Previously Presented) The substrate structure according to any one of claims 1 to 3, wherein on said insulating material film, a film comprising an insulating material is further laminated.

7. (Previously Presented) The substrate structure according to claim 6, wherein a thickness of the film comprising the insulating material is within a range of 20 nm to 150 nm.

8. (Previously Presented) The substrate structure according to claim 6, wherein a thickness of the film comprising said insulating material is within a range of 40 nm to 100 nm.

9. (Currently Amended) A substrate structure ~~which is a precursor to an electron source, and on which an electron-emitting device of the electron source is to be disposed~~, comprising:

a substrate; and

an SiO₂ film provided on said substrate,

wherein said SiO₂ film comprises a plurality of metallic oxide particles having an average particle size within a range of 6 nm to 60 nm as expressed in a median value;

wherein said substrate structure is a precursor to an electron source, and said SiO₂ film has a surface on which an electron-emitting device of the electron source is to be arranged.

10. (Previously Presented) The substrate structure according to claim 9, wherein said SiO₂ film further comprises phosphorus.

11. (Previously Presented) The substrate structure according to claim 9, wherein said SiO₂ film further comprises phosphorus in 1 weight portion to 10 weight portions.

12. (Previously Presented) The substrate structure according to claim 9, wherein a thickness of said SiO₂ film is within a range of 200 nm to 600 nm.

13. (Previously Presented) The substrate structure according to claim 9, wherein a thickness of said SiO₂ film is within a range of 300 nm to 400 nm.

14. (Previously Presented) The substrate structure according to claim 9, wherein on said SiO₂ film a film comprising an SiO₂ film is further laminated.

15. (Previously Presented) The substrate structure according to claim 14, wherein a thickness of the film comprising said SiO₂ film is within a range of 20 nm to 150 nm.

16. (Previously Presented) The substrate structure according to claim 14, wherein a thickness of the film comprising said SiO₂ film is within a range of 40 nm to 100 nm.

17. (Previously Presented) The substrate structure according to claim 1 or 9, wherein the average particle size as expressed in the median value is within a range of 15 nm to 30 nm.

18. (Previously Presented) The substrate structure according to claim 1 or 9, wherein the metallic oxide particles are electron conduction oxide particles.

19. (Previously Presented) The substrate structure according to claim 1 or 9, wherein the metallic oxide particles are metallic oxide particles chosen from at least one of the oxides of Fe, Ni, Cu, Pd, Ir, In, Sn, Sb and Re.

20. (Previously Presented) The substrate structure according to claim 1 or 9, wherein the metallic oxide particles are particles of SnO_2 .

21. (Previously Presented) The substrate structure according to claim 1 or 9, wherein said substrate is a substrate comprising sodium.

22. (Previously Presented) An electron source comprising a substrate structure and at least one electron-emitting device arranged on said substrate, wherein said substrate structure is the substrate structure according to claim 1 or 9.

23. (Previously Presented) The electron source according to claim 22, wherein each of said at least one electron-emitting device is an electron-emitting device comprising a conductive film containing an electron-emitting portion.

24. (Previously Presented) The electron source according to claim 22, wherein said at least one electron-emitting device is a plurality of electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings.

25. (Previously Presented) The electron source according to claim 22, wherein said at least one electron-emitting device is an electron-emitting device comprising a conductive film comprising an electron-emitting portion between one pair of electrodes.

26. (Previously Presented) The electron source according to claim 25, wherein the at least one electron-emitting device is a plurality of electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings, wherein said one pair of electrodes are composed of a material comprising platinum as a principal component and wherein said wirings are composed of a material comprising silver as a principal component.

27. (Previously Presented) An image display apparatus comprising an envelope, at least one electron-emitting device disposed in said envelope on a substrate structure, and an image display member for displaying images by irradiation of at least one electron from said at least one electron-emitting device, wherein the substrate structure is the substrate structure according to claim 1 or 9.

28. (Previously Presented) The image display apparatus according to claim 27, wherein said at least one electron-emitting device is an electron-emitting device comprising a conductive film comprising an electron-emitting portion.

29. (Previously Presented) The image display apparatus according to claim 27, wherein said at least one electron-emitting device is a plurality of electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings.

30. (Previously Presented) The image display apparatus according to claim 27, wherein each of said electron-emitting devices is an electron-emitting device comprising a conductive film comprising an electron-emitting portion between one pair of electrodes.

31. (Previously Presented) The image display apparatus according to claim 30, wherein the at least one electron-emitting device is a plurality of electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings, wherein said one pair of electrodes are composed of a material comprising platinum as a principal component and wherein said wirings are composed of a material comprising silver as a principal component.